

# żytnia ipa

- Gravity **16.1 BLG**
- ABV ---
- IBU **78**
- SRM **12.7**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **2 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2 kg (31.7%)	85 %	8
Grain	Strzegom Pilzneński	2 kg (31.7%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (31.7%)	79 %	16
Grain	Strzegom Karmel 150	0.3 kg (4.8%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian dana	40 g	60 min	13.5 %
Aroma (end of boil)	Willamette	70 g	15 min	5 %
Aroma (end of boil)	Cascade	40 g	10 min	6 %
Dry Hop	Citra	20 g	5 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis